IN THE DRAWINGS:

The attached sheets of drawings include changes to Figure 5 and 8. These sheets replace the original sheets showing Figures 5 and 8.

Attachment: Replacement Sheets.

REMARKS

Figures 5 and 8 have been amended to label the blocks representing structures. Support for the amendments to Figures 5 and 8 may be found throughout the specification. Claim 22 has been amended to correct an informality contained therein. No new matter has been added. Upon entry of this Amendment, claims 10-27 remain pending.

In the Office Action dated April 6, 2006, the drawings were objected to because in Figures 5 and 8, the structures represented by blocks were not properly labeled. Figures 5 and 8 have been amended to label the blocks. Accordingly, Applicants respectfully request that the objection to the drawings be withdrawn.

In the Office Action, claims 10-27 were rejected under 35 U.S.C. §102(b) as being anticipated by Fujie et al. (U.S. Patent No. 5,696,623). Applicants respectfully traverse this rejection.

Independent claim 10 recites a lithographic projection apparatus that includes, *inter alia*, a fluid cleaning system that cleans a fluid to be introduced into a region in which the optical element is disposed, the fluid cleaning system comprising, *inter alia*, a nucleated surface provided with a plurality of nucleation sites, wherein the nucleated surface is disposed in the cleaning zone. Fujie et al. dos not disclose or suggest all of the features of claim 10.

Fujie et al. teaches the use of a gas cleaner 202 for an ultraviolet exposure apparatus 201. *See* Fujie et al. at col. 10, ln. 59 – col. 11, ln. 8. The gas cleaner 202 includes an ultraviolet lamp 203, a precipitation region 205 that is formed along a gas flow path 204, and a temperature regulator 206 for regulating the temperature of the precipitation region 205. *See* Fujie et al. at col. 11, lns. 3-8. Fujie et al. does not disclose or suggest a nucleated surface that is provided with a plurality of nucleation sites that is disposed in a cleaning zone, as recited by claim 10. It is the Examiner's position that the precipitation zone 205 is a nucleated surface because "the precipitation region would have nucleation sites in order for the precipitates to accumulate in that region." *See* the Office Action at page 3. Fujie et al. does not teach or even suggest that the precipitation region has a plurality nucleation sites. The Examiner appears to be relying on the theory of inherency to fill in this gap. However, "[i]n relying upon the theory of inherency, the examiner must provide a basis in fact and/or technical reasoning to reasonably support the determination that the allegedly inherent characteristic necessarily flows from the teachings of the applied prior art." *Ex parte Levy*, 17 USPQ2d 1461,1464 (Bd. Pat. App. & Inter. 1990) (emphasis in original). *See* MPEP

§2112. The Examiner has not provided any such evidence. As is taught by Fujie et al., temperature is used to accumulate the precipitates that are in the gas. The use of a nucleated surface with a plurality of nucleation sites does not necessarily flow from the teachings of Fujie et al. because such a surface does not have to be present for the precipitation to occur.

Accordingly. Applicants respectfully submit that claim 10 and claims 11-27, which include additional advantageous features and depend from claim 10, are patentable over Fujie et al., and respectfully request that the rejection to claims 10-27 be withdrawn.

Dependent claim 17 adds the additional advantageous feature of the nucleated surface comprising a surface of foamed or glass wool. Fujie et al. does not disclose or suggest this feature. As such, Applicants respectfully submit that claim 17 and claim 18, which depends from claim 17, are patentable over Fujie et al. for this additional reason.

Dependent claim 21 adds the additional advantageous feature of the surface area of the nucleated surface being greater than the surface area of a lens comprised in the projection system. Fujie et al. does not disclose or suggest this additional feature. As such, Applicants respectfully submit that claim 21 is patentable over Fujie et al. for this additional reason.

Dependent claim 22 adds the additional advantageous feature of the nucleation sites being salt crystal growth seeds that are sufficient to achieve association of a dissociated contaminant with the nucleated surface and the association includes the formation of salt crystals at or in the vicinity of the nucleation sites. Fujie et al. does not disclose or suggest this additional feature. As such, Applicants respectfully submit that claim 22 is patentable over Fujie et al. for this additional reason.

Dependent claim 23 adds the additional advantageous feature of the contaminants being retained on the nucleated surface as salt crystals. Fujie et al. does not disclose or suggest this additional feature. As such, Applicants respectfully submit that claim 23 is patentable over Fujie et al. for this additional reason.

In the Office Action, claims 10-27 were rejected under 35 U.S.C. §102(e) as being anticipated by Mori et al. (EP 0874283 A2). Applicants respectfully traverse this rejection.

First, Applicants respectfully submit that because Mori et al. is a non-U.S. publication, it does not qualify as prior art under 35 U.S.C. §102(e). In view of the publication date of Mori et al., Mori et al. qualifies as prior art under 35 U.S.C. §102(b) and will be treated as such.

Second, Applicants respectfully submit that Mori et al. does not disclose or suggest all of the features of claim 10-27. Independent claim 10 is discussed above. Mori et al. does not

disclose or suggest a lithographic projection apparatus that includes, *inter alia*, a fluid cleaning system that cleans a fluid to be introduced into a region in which the optical element is disposed, the fluid cleaning system comprising, *inter alia*, a nucleated surface provided with a plurality of nucleation sites, wherein the nucleated surface is disposed in the cleaning zone.

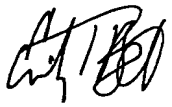
Mori et al. teaches a photo-cleaning method to clean the optical components of an optical exposure apparatus. *See* Mori et al. at Abstract. As taught by Mori et al., moisture and organic matter that adhere to the optical elements $L_1 - L_5$ can be eliminated by the photo-cleaning effect due to the exposure illumination light beam. *See* Mori et al. at col. 24, lns. 17-21. Because the moisture and organic matter that have separated from the optical elements $L_1 - L_5$ may become suspended in chamber 102 or in the spaces between the optical elements, an inert gas, such as newly dried nitrogen is supplied to the chamber 102 and to spaces between the optical elements $L_1 - L_5$ via a gas supply apparatus 120, and discharged from the chamber 102 and the spaces between the optical elements $L_1 - L_5$ via a gas discharge apparatus. *See* Mori et al. at col. 24, lns. 22-46. Mori et al. does not even disclose a fluid cleaning system, let alone one that includes a nucleated surface provided with a plurality of nucleation sites that is disposed in a cleaning zone, as recited by claim 10.

Accordingly, Applicants respectfully submit that claim 10 and claims 11-27, which include additional advantageous features and depend from claim 10, are patentable over Mori et al., and respectfully request that the rejection to claims 10-27 be withdrawn.

All objections and rejections having been addressed, it is respectfully submitted that the present application is in a condition for allowance and a Notice to that effect is earnestly solicited. If any point remains in issue which the Examiner feels may be best resolved through a personal or telephone interview, please contact the undersigned at the telephone number listed below.

Please charge any fees associated with the submission of this paper to Deposit Account Number 033975. The Commissioner for Patents is also authorized to credit any over payments to the above-referenced Deposit Account.

Respectfully submitted,
PILLSBURY WINTHROP SHAW PITTMAN LLP



EMILY T. BELL
Reg. No. 47,418
Tel. No. 703.770.7661
Fax No. 703.770.7901

Date: July 5, 2006
P.O. Box 10500
McLean, VA 22102
703.770.7900